



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,281	12/14/2001	Hung Thai Nguyen	21748-913	9142

7590 08/26/2003

Bruce J. Wolstoncroft, Esquire  
Barley, Snyder, Senft & Cohen, LLC  
126 East King Street  
Lancaster, PA 17602

EXAMINER

GLENN, KIMBERLY E

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/020,281	NGUYEN, HUNG THAI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kimberly E Glenn	2817	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-16 is/are allowed.
- 6) ☒ Claim(s) 1 and 17 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                               | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4/01/02</u> . | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION*****Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second compensation line intertwined with the first compensation line to create a first compensation line assembly must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The figures show a first signal pair (11) having a first conductor (T1) and a second conductor (R1); a second signal pair 12 having a third conductor (R2) and a fourth conductor (T2); a first input signal (5) having the first conductor (T1) attached thereto; a second input signal (4) having the second conductor (R1) attached thereto; a third input signal (6) having the third conductor (R2) attached thereto; a fourth input (3) signal having the fourth conductor (T2) attached thereto; a first compensation line (45 or 47) attached to the first input signal(5) ; and a second compensation line (44 or 41) attached to the third input signal (6). The figure do not show the second compensation line (44 or 41) being intertwined with the first compensation line (45 or 47) to create a first compensation line assembly.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

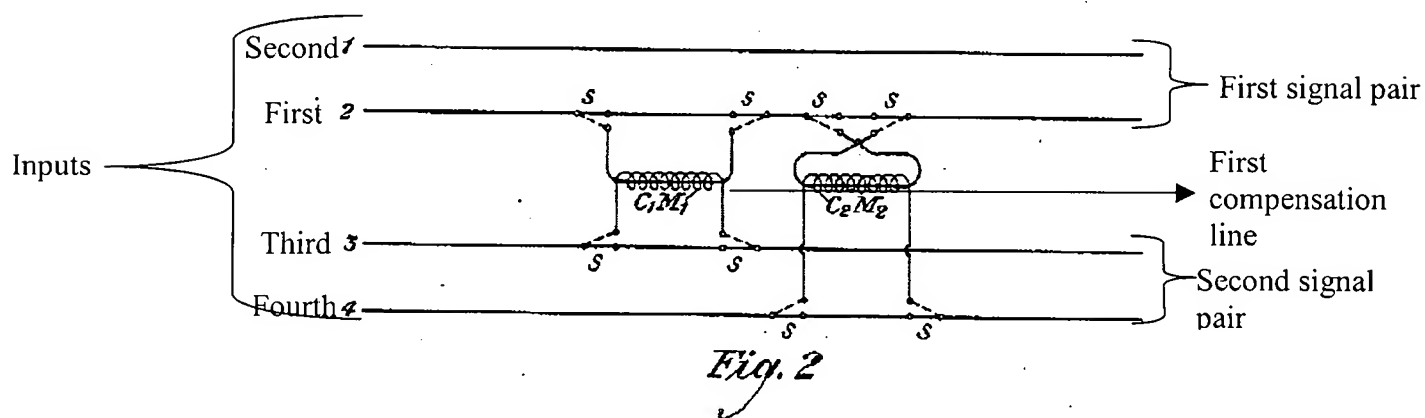
Art Unit: 2817

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Coolidge US Patent 1,864,524.

Coolidge disclose a first signal pair having a first conductor (2) and a second conductor (1); a second signal pair having a third conductor (3) and a fourth conductor (4); a first input signal having the first conductor (2) attached thereto; a second input signal having the second conductor attached thereto; a third input signal having the third conductor attached thereto; a fourth input signal having the fourth conductor attached thereto; a first compensation line attached to the first input signal; and a second compensation line attached to the third input signal and intertwined with the first compensation line to create a first compensation line assembly (C1M1) having capacitive and inductive coupling.



*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coolidge US Patent 1,861,524 in view of Adriaenssens et al US Patent 5,997,358.

The primary reference, Coolidge teach a first signal pair having a first conductor (2) and a second conductor (1); a second signal pair having a third conductor (3) and a fourth conductor (4); a first input signal having the first conductor (2) attached thereto; a second input signal having the second conductor attached thereto; a third input signal having the third conductor attached thereto; a fourth input signal having the fourth conductor attached thereto; a first compensation line attached to the first input signal; and a second compensation line attached to the third input signal and intertwined with the first compensation line to create a first compensation line assembly (C1M1) having capacitive and inductive coupling. (See pages 1 and 2 of reference)

Coolidge is shown to teach all the limitations of the claims with exception of the two pair of conductors and the pair of insulated intertwined conductors being disposed on a substrate.

Adriaenssens et al show that it is well known and desirable in the art for compensation circuit to be disposed on a substrate. (Figure 9)

Art Unit: 2817

One skill in the art at the time of the invention would have found it obvious to place the circuit of Coolidge on a substrate. The motivation/suggestion for this modification would be to provide a means of support at instances where the length of the conductors is small.

***Allowable Subject Matter***

Claims 6-16 are allowed.

Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: With regards to claims 6-16 the prior art of record does not disclose or fairly teach a cross talk compensation circuit being disposed on both sides of a substrate. With regards to claim 2, the prior art of record does not disclose or fairly teach a fifth conductor having a first end connected to the first input and a second end connected to the first compensation line. With regards to claims 3 and 4, the prior art of record does not disclose the conductors being ring conductors or tip conductors.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Curry et al US Patent 6,379,157, Aekins US Patents 6,057,743, 5,618,185, 5,931,703, Forbes et al US Patent 6,520,808, Borbolla et al US Patent 6,231,397, Jensen et al US Patent 6,464,29, DeFlandre et al US Patent 6,356,162, Klas et al US Patent 5,432,484 and Bockelman US Patent 5,430,247.

Art Unit: 2817

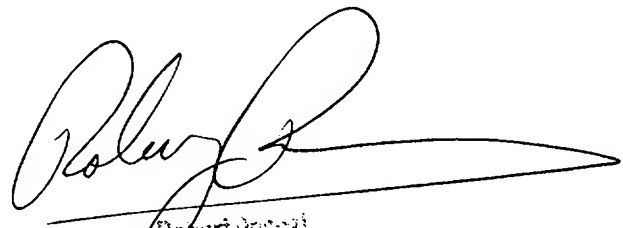
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly E Glenn whose telephone number is (703) 306-5942. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (703) 308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Kimberly E Glenn  
Examiner  
Art Unit 2817

keg  
August 18, 2003



Robert Pascal  
Supervisory Patent Examiner  
Technology Center 2817